

**PITAC**

**Sub-Panel on Digital Divide for  
Smaller Institutions of Higher Education**



***Avoiding the Digital Divide  
for Smaller Institutions***


***Ching-chih Chen***

*Chair*

September 20, 2000

# **Conference on Resolving the Digital Divide: Information, Access, and Opportunity,**

Washington DC, October 19, 1999



- A Report to the President on Digital Divide -  
Feb. 2, 2000
- \$6-million NSF Advanced Networking Project  
with Minority-Serving Institutions (AN-MSI) grant

# **Avoiding the Digital Divide for Smaller Institutions of Higher Education**, Arlington, VA, June 5-6, 2000



- **Second in a series of PITAC conferences designed to help resolve issues of the digital divide.**
- **PITAC wants to help ensure that all colleges and universities have the ability to access services over a network of sufficient quality and robustness to complete their tasks.**
- **At the request of PITAC, EDUCAUSE, the NCO and NSF convened a meeting on June 5-6, 2000 to explore the potential digital divide for advanced networks in smaller institutions.**
- **Participation by over 40 leaders from smaller institutions, as well as representatives of the White House, NSF, NCO, and Internet2.**

# Carnegie Classification of Over 2,000 American Universities and Colleges



- **Research Universities I** — Award 50 or more doctoral degrees each year and receive annually \$40-million or more in federal support
- **Research Universities II** — Award 50 or more doctoral degrees each year and receive annually \$15.5- to 50-million or more in federal support
- **Doctoral Universities I** — Award at least 40 doctoral degrees each year in five or more disciplines
- **Doctoral Universities II** — Award at least 10 doctoral degrees each year in three or more disciplines...
- **Master's Universities & Colleges I** — Award 40 or more master's degrees each year in three or more disciplines...
- **Master's Universities & Colleges II** — Award 20 or more master's degrees each year in one or more disciplines...
- **Baccalaureate Colleges I** — Award 40% or more of their baccalaureate degrees in liberal arts fields
- **Baccalaureate Colleges II** — Award less than 40% or more of their baccalaureate degrees in liberal arts fields
- **Associate of Arts College** — Offers associate of arts certificate or degree programs...
- **Professional Schools...** — At least 50% of the degrees awarded are in a specialized field ranging from bachelor's to doctorate.

# Participants' Distribution



## **The attendee breakdown by Carnegie Class:**

- Research Universities II - 1
- Doctoral Universities I - 1
- Doctoral Universities II – 5
- Master's Universities & Colleges I – 10
- Master's Universities & Colleges II – 4
- Baccalaureate Colleges I – 11
- Baccalaureate Colleges II – 5
- Associate of Arts College – 2
- Other - 1

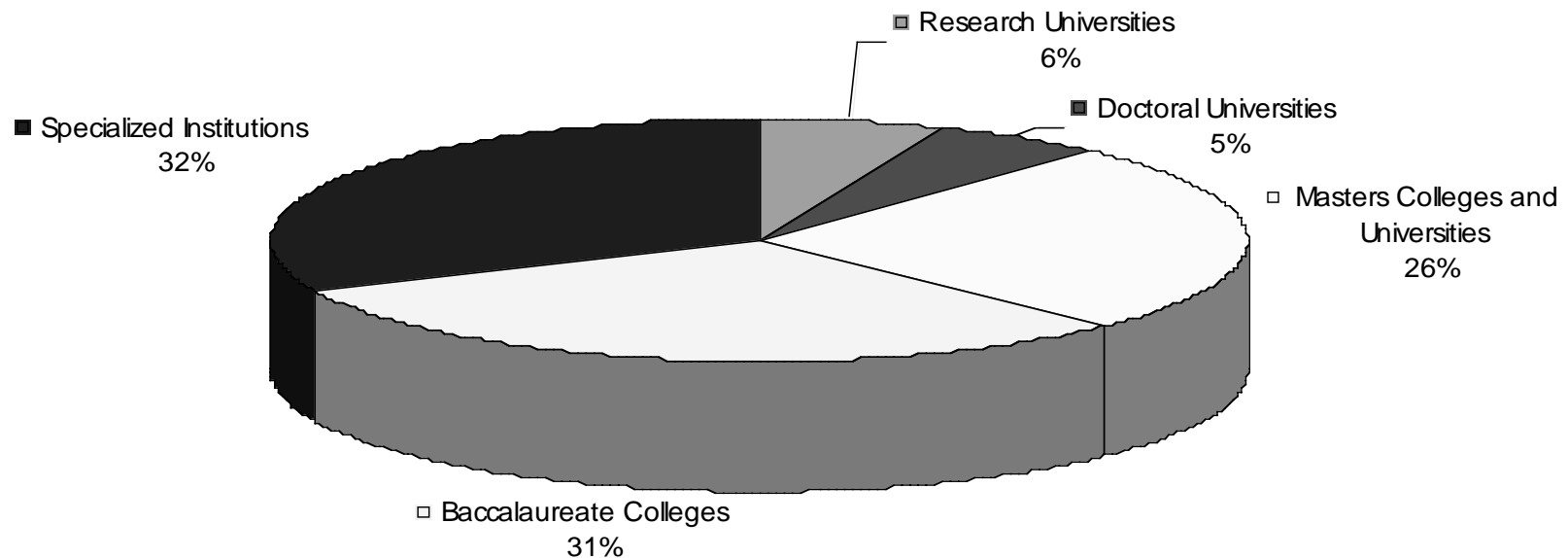
## **Minority representation:**

- Tribal College – 1
- HBCU – 2
- Hispanic association - 1

## **The attendee breakdown by FTE:**

- Small (under 2,000) – 10
- Medium (2,000-7,999) – 21
- Large-Medium (8,000-18,000) - 10

## U.S. 4-Year Degree Granting Institutions by Carnegie Class



Source: U.S. Department of Education, Integrated Postsecondary Education Data System  
Institutional Characteristics Data File 1997-98 (Final Release - August 16, 1999)  
<http://nces.ed.gov/ipeds/ic9798/>

# 1900+ Smaller Institutions: Their Role in Research and Education



- The top tier of these smaller institutions (next to the top Carnegie Class institutions) support active and high-level R&D activities in their areas of specialization
- From the education angle, these smaller institutions provides the majority of the post secondary education in the US, as shown in the 1997 enrollment statistics:
  - ◆ Largest Research & Doctoral Universities (156) - 2,995,886
  - ◆ Other 4-year institutions (2,065) - 5,900,879
- They are producing many future researchers and much of our IT workforce.

# Current Situation



- The High Performance Connection Program has enabled over 170 universities to have high-speed network connections for R&D activities
- The other 1900+ smaller institutions are “off the advanced net.” – This “inequity” threatens to inhibit the development of the full potential of 21<sup>st</sup> century higher education in the U.S. and we must find ways to address this digital divide.

(More details can be elaborated in the full report in print later this year, but is available now at: [www.educause.edu/netatedu/events/ptc00](http://www.educause.edu/netatedu/events/ptc00))



# Recommendation 1



Provide immediate incentives to enable those smaller institutions with innovative research projects to gain access and connection to the advanced network.

*A program for smaller institutions modeled after EPSCoR is recommended.*

## **Recommendation 2**



Encourage the expansion of advanced network access to a broader spectrum of higher education by offering multi-year infrastructure funding opportunities for projects that utilize advanced network technologies for innovative educational purposes.

# Other Recommendations



See the page summary from [EDUCAUSE](#)

# Acknowledgement



- EDUCAUSE – specifically Mark Luker and staff
- NSF for funding this workshop
- NCO/CIC – particularly Yolanda Comedy
- Tom Kalil of the White House National Economic Council
- Lori Perine of the White House Office of Science and Technology Policy